DOCUMENT RESUME

ED 474 894 SP 041 456

AUTHOR	Navarro, Juan Carlos; Verdisco, Aimee
TITLE	Teacher Training in Latin America: Innovations and Trends. Sustainable Development Department Technical Paper Series.
INSTITUTION	Inter-American Development Bank, Washington, DC.
REPORT NO	EDU-114
PUB DATE	2000-08-00
NOTE	31p.
AVAILABLE FROM	Inter-American Development Bank, Publications, Education Unit, 1300 New York Avenue, N.W., Washington, DC 20577. Tel: 202-623-2087; Fax: 202-623-1588; e-mail: sds/edu@iadb.org; Web site: http://www.iadb.org/sds.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01/PC02 Plus Postage.
DESCRIPTORS	Continuing Education; *Educational Quality; Elementary Secondary Education; *Faculty Development; *Inservice Teacher Education; *Teacher Qualifications; Teaching Methods
IDENTIFIERS	*Latin America

ABSTRACT

This paper reviews relevant literature and examines various case studies in order to synthesize recent and promising trends in the field of teacher training in Latin America. Five sections focus on: "Trends, Not Best Practices" (teachers as an issue of education policy, dispelling myths, and innovative programs and identifiable trends); "Current Trends in Teacher Training in Latin America" (classroom-based training, effective teacher education as continuing education, group training and networking, intensive use of pedagogic support and supervision, integration of training into the larger framework of teacher career regulations and incentives. and training as a response to social and educational priorities at the local level); "Scaling Up Replicability"; and "Conclusion" (a strong case can be made that much more than training is involved in effectively tackling the troubles of teaching in Latin America, which include differences in teaching methods and teacher salaries). (Contains 33 references.) (SM)

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Teacher Training in Latin America

Innovations and Trends

Juan Carlos Navarro
Aimee Verdisco

Sustainable Development Department
Technical Papers Series

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Juan Carlos Navarro
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Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library

Navarro, Juan Carlos.
Teacher training in Latin America : innovations and trends / Juan Carlos Navarro, Aimee Verdisco.

p. cm. (Sustainable Development Dept. Technical papers series ; EDU-114)
Includes bibliographical references.

1. Teachers--Training of--Latin America. 2. Teachers--In-service training--Latin America. I. Verdisco, Aimee. E. II.Inter-American Development Bank. Sustainable Development Dept. Education Unit. III. Title. IV. Series.

370.711 N282--dc21

Juan Carlos Navarro is an Education Specialist and Aimee Verdisco is a consultant specializing in education in the Sustainable Development Department. The authors would like to recognize the contribution of Marcelo Cabrol (Social Programs Specialist, RE2/SO2) to the research project that made this paper possible. Rich Tobin (American Institute for Research) and Jeff Puryear (PREAL) provided valuable comments. Claudio de Moura Castro (SDS Education Advisor) and Katherine Taylor (consultant) provided comments on an earlier draft.

The information and opinions contained in this article are those of the authors and do not necessarily reflect official position of the Inter-American Development Bank.

August 2000

This publication (No. EDU-114) can be obtained through:

Publications, Education Unit
Inter-American Development Bank
1300 New York Avenue, N.W.
Washington, D.C. 20577

E-mail: sds/edu@iadb.org
Fax: 202-623-1558
Web site: *www.iadb.org/sds/edu*

Foreword

On average, teachers' qualifications in Latin America fall short of what is needed to implement and sustain the education reforms under way in most countries. Large investments in teacher training, both pre-service and in-service have been made and will continue to be made by the governments of the region in recognition of this fact, often with the support of the IDB and other international organizations. This paper responds to the growing demand for new approaches to the design of teacher training components in education reforms. This demand reflects widespread disappointment with the effectiveness of traditional methods and the principles upon which they are organized. The paper builds on the existing literature on the subject around the world but draws its conclusions from eight case studies on innovations in teacher training in Latin America. The cases include both in-service and pre-service programs, in rural and urban environments and public as well as private initiatives, in different countries.

Rather than focusing on the description and evaluation of specific programs, the paper aims at finding common denominators—or "trends"—in new approaches to teacher training. Despite widespread diversity in the nature of the programs reviewed, classroom-based training, continuing education, intensive use of group training and supervision, and an attempt to integrate teacher training in the larger framework of teachers' career regulations emerge as clear common features, as well as an awareness of the need to adapt design to particular local conditions and priorities. Issues of cost-effectiveness and scaling up of innovations are also taken into consideration.

It is hoped that such trends will be helpful in designing future programs in diverse institutional contexts. The paper may also be useful in facilitating the dialogue between governments, private actors and international organizations on key issues to be addressed when planning investments in teacher training.

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Introduction

Teachers are the main link between societies' expectations of their educational systems and concrete student outcomes. In Latin America, this link is weak and the quality of teachers and teaching leave much to be desired. Even after allowing for differences among countries due to variations in the level of economic development and the strength of institutions in the education sector, most observers would be hard pressed to find a country satisfied with the capabilities and performance of its teachers. The profession long ago lost the prestige and social status it once enjoyed. New and often competing requirements placed on massive school systems have eroded the quality of public education. Schools can no longer afford to have distinguished intellectuals or top-level professionals teaching in their classrooms.

The "golden era" of teaching is gone for good, if only because—fortunately—so too are the times of massive illiteracy, education restricted to the elite and low enrollment rates in primary education in Latin America. Millions of children have to be educated. Yet this does not automatically mean, as we have learned at high costs over the past two or three decades, that the thousands of adults leading classes throughout the region necessarily have the appropriate qualifications to teach. Nor is there necessarily any connection between appropriate teaching credentials and the motivation and support that are needed to facilitate and promote the intended task of helping children to learn. The equation for good quality teaching in education systems of massive scales throughout Latin America has yet to be solved. And, from all indications, there are no easy solutions or much consensus about where to start.

Through the review of the literature and an examination of various case studies, this paper attempts to synthesize recent and promising trends in the field of teacher training in Latin America. These trends are intended to provide a preliminary indication of the methods and mechanisms of teacher training that can be adapted to meet the daily challenges of improving learning in the classrooms.

Trends, Not Best Practices

There is no one best way to train teachers. Success is highly sensitive to context. Perennial formulas, by definition, are hard to find. Our intent is more modest: to identify trends associated with interesting outcomes, if not outright success.

The approach used in this study is straightforward. Given all the difficulties in determining what works in teacher training, it is increasingly clear what does *not* work. As a result, innovations explicitly designed to overcome the failures, errors and problems of previous initiatives have flourished in most countries and education systems. In an effort to capture these efforts, the Education Unit of the IDB, with the support in some cases of other sponsors, commissioned the following eight case studies:[1]

- Teacher training in the context of the Accelerated Training Program, a privately initiated program applied in the school systems of several Brazilian states and municipalities (Oliveira, 1998).
- The Program for the Continuing Education of Teachers (PFPD) developed and managed by the school system of Bogota, Colombia (Chiappe and Zuluaga, 1998).
- The *microcentros* for teacher training in rural schools in Chile (Williamson, 1998).
- Teacher training in the context of the Educational Technology Program in Costa Rica, a collaborative effort between the Omar Dengo Foundation and the Ministry of Education (Anfossi and Fonseca, 1999).
- The Regional Center for Higher Education-ESTIPAC, in Jalisco, Mexico (Limón, 1998).
- The Regional Centers for Teachers, post-secondary institutions providing a new, intensive program of teacher training in Uruguay (Castro, 1999).
- Teacher training in *Fe y Alegría*, a private, publicly-supported network of Catholic schools for poor children in Venezuela (Pérez Esclarín, 1998).
- The Teacher Training Program (*Programa de Capacitación Docente*, PLANCAD) in Peru, under the responsibility of the Ministry of Education (Instituto Apoyo, 2000).

This paper provides a first report on the issues raised and trends detected through the review.[2]

TEACHERS AS AN ISSUE OF EDUCATION POLICY

Dealing with teacher issues as a matter of policy has all the characteristics of the most difficult problems faced by governments and societies

[1] The Ministry of Education and Sports of Peru sponsored an evaluation of PLANCAD as part of the background studies for an IDB loan under preparation with the support of Regional Operations Department 3, Social Programs Division. The only case study fully published before this paper corresponds to the Castro paper on the Regional Centers in Uruguay, in Vaillant and Wettstein (1999). This volume contains additional studies of the case that also have been very useful in writing this paper. Selected cases will be published separately. For more information, contact the Education Unit by e-mail at *sds/edu@iadb.org*.

[2] From this point forward, all information and comments related to these cases are based on the studies just listed; unless otherwise noted, references will not be repeated.

alike. Such issues are politically and ideologically charged; their financial implications, in almost any scenario, are huge; and technical definition largely has been weak, loose, and anything but clear-cut and convincingly conceptualized.

It is, therefore, not surprising that issues related to teachers constitute an underdeveloped field of education and that interventions intended to address these issues have been less than satisfactory. Indeed, more than a few education projects can be read as quite deliberate attempts to fix all aspects of an education system—from infrastructure, to equipment, materials, financial management and technology—with the exception of those dealing with teachers. Few projects address, directly or indirectly, the way teachers work or live within the system. Important reforms under way in several countries across the region explicitly seek to improve the quality of the teaching force. Through interventions promoting activities such as parental involvement, testing, or school management, it is hoped that accountability will be enhanced, stakeholders will be mobilized, and the day-to-day functioning of the education institutions will be made more responsive and efficient. Yet, more often than not, these interventions fail to tackle head on such fundamental issues as who teaches, how much is taught and how well it is taught.

Investments in teacher training have been the one outstanding exception. Support of teacher training, particularly in-service, has become a routine component of major investment packages for the education sector, with or without support of multilateral organizations. The Inter-American Development Bank, to mention one example, has committed funds for teacher training to the point that nearly one of five teachers in the region has been or will be trained in the near future within the context of a Bank-related project (Deutsch and Verdisco, 1997).

The priority given to in-service training stems from an almost region-wide recognition that a substantial share of teachers in each country are poorly prepared to perform well in the classroom. What pre-service training many may have received is likely to have been insufficient or inadequate or both (IDB, 1999; Lockheed and Verspoor, 1991). Thus, rather than justifying training in the name of "lifelong" or "continuous" education *per se*, the working hypothesis widely applied throughout Latin America stems from a somewhat different perspective. Training is thought to deliver or compensate for whatever teachers lack in terms of skills, motivation, or knowledge. The particular kinds of in-service training thus provided are seen as a general response to the failure of teachers to teach at a level expected by society or as required by a given set of standards. Yet, by definition, such responses have been partial. Training as traditionally and typically delivered tends to treat the teacher in isolation, separate from the larger contexts of the classroom, school, and community.

DISPELLING THE MYTHS

Training teachers is a daunting task. No country, developed or otherwise, is completely satisfied with initiatives implemented in this sphere (see OECD, 1998). In Latin America, dissatisfaction with current practices in the field prevails among education specialists and government officials. Widespread adoption of teacher training programs is rarely accompanied by dedicated efforts for monitoring and evaluation. No matter how much training teachers may have received in the recent past, serious doubts persist about the effectiveness of such training in affecting the end goal of all initiatives on this front: improving classroom practices in a way consistent with better learning. The fact that most societies across the region recognize both the need for teacher education and its importance stems from the realization that current practices fall short of expectations and needs. More often than not, concrete decisions about what and how to deliver teacher training are fed by interest group preferences or are shaped by weak assumptions and designs (Tatto and Velez, 1997; Skyes, 1997).

Among these weak assumptions and designs is the common, albeit mostly discredited, notion that large-scale training programs can operate through "cascades." Under this approach, an initial, relatively modest number of teachers are trained. Once trained, they, in turn, train a second round of teachers who, in turn, would train a

third tier and so on (see OECD, 1998). Although sound in the abstract, "cascades" have produced less-than-convincing results in practice. Innovations in teacher training that lead to improvements in student learning are likely to induce—if not outright demand as a prerequisite—changes in how schools and teachers are managed. Examples abound of well-intentioned and even well-financed efforts that fail to produce expected results due to inadequate management, communication, and/or other institutional considerations. "Cascade" approaches, unfortunately, tend to fall into this group. Their implementation is often truncated by factors other than the disposition of teachers to train other teachers.

Another problematic assumption, still much alive, is that pre-service training can be improved, almost automatically, by pushing teacher training programs from the secondary school level (*escuela normal*) or from short-career status to full university degree programs. The rationale behind such a move is obvious: as the level of teacher education improves, the quality of teaching also improves. Yet the correlation is not perfect. In fact, in more than one instance, the policy has led to the loss of qualified individuals to more financially rewarding professions. Educational systems have been left, on average, with student teachers or teachers with less exposure to the realities of the classroom than those of previous generations. By pushing teacher training higher up on the educational ladder, the academic side of learning the profession becomes further removed from the practice of teaching in real classrooms. The gap between theory and practice widens and teacher training becomes more abstract and theoretical in its delivery. Although such delivery can successfully prepare students for myriad professions, it is not particularly well-suited for preparing good teachers. Substantial contact between theory and practice lies at the heart of effective teaching.

An additional problematic assumption arises from the poor design of incentives. Training often is linked to career advancement and salary improvements. But this linkage functions in such a way that training does little to improve performance. By focusing both on diplomas or certificates that teachers accumulate and the label of the training delivered and received, as opposed to its quality, such (misplaced) incentives only perpetuate the consequences of substandard performance (see IDB, 1999). Indeed, the impact of well-focussed and timely training can be extremely limited if it is poorly designed.

Teacher training is hardly the kind of field that lends itself to well-structured, highly deductive theoretical approaches. It is, like the study of management, an area in which knowledge is much more likely to be developed from experience, trial and error and reflection on practice. Cognitive psychology and pedagogy can help and have helped but teacher training policy requires a more integrated approach that goes far beyond the particular content of the training to be carried out to incorporate financial, managerial, cultural and economic perspectives and contributions. These dimensions influence the eventual success or failure of a training program—and finding an adequate combination of these dimensions is not an exact science.

INNOVATIVE PROGRAMS AND IDENTIFIABLE TRENDS

The difficulties in determining what works in teacher training are widely recognized throughout Latin America. Indeed, they have prompted governments and education systems alike to design and implement an array of innovations explicitly intended to overcome perceived failures in training teachers.

The larger research initiative, upon which this paper is based, employed a broad definition of innovation. Cases included in the project deal with programs for educating teachers that responded to failures in mainstream arrangements. Innovation, accordingly, was understood as the deliberate response, as seen by those involved in designing and implementing each program, to perceived failures in existing teaching training practices. Each case had to clearly define the problem or set of problems in established training practices that the innovation sought to address. At the outset, it was hypothesized that a possible—albeit incomplete—list of such problems would include:

- *Failures in pedagogic methods used to teach teachers:* The paradox of teachers being taught the latest constructivist approaches by frontal methods and in a memoristic fashion is well known (OAS, 1998; Calvo, 1997; Tenti, 1997; UNICEF, 1997; World Bank, 1998; Tatto and Velez, 1997).There has been widespread criticism of isolated or individualistic training as opposed to team-based training and of university-based teacher education as opposed to within-classroom and tutoring approaches (Darling-Hammond, 1992; UNICEF, 1997; World Bank, 1998; OECD, 1998). The potential of technology in teacher training is much talked about but it has not been firmly established (IDB, 1999).

- *Failures in the content of training:* It is common to find a mismatch between subject areas where a clear shortage of quantity or quality of teachers is diagnosed (e.g., math, science and foreign languages), and the supply of training opportunities (Robinson, 1996; UNICEF, 1997; IDB, 1999). Similarly, teachers that are likely to face disadvantaged or culturally diverse student groups are often introduced to teaching techniques appropriate for relatively privileged or homogenous groups of children (Tatto and Velez, 1997; Darling-Hammond and Cobb, 1996; OECD, 1998).

- *Failures in the impact of training:* The effectiveness of many programs *vis-à-vis* teaching practices or classroom activities has been nil or extremely short lived (Harbison and Hanushek, 1992; Tenti, 1997). Trained teachers often revert quickly to old habits and training activities have little effect on their motivation and ability to use the innovation or good practices they were exposed to during training.

- *Failures in integrating teacher training into the larger context of education policy and institutions:* Teachers often receive training as a means of advancing in their careers or of satisfying a given legal requirement. In many instances, however, training is treated in a superficial or formalistic manner. Prevailing incentive structures lead teachers to accumulate diplomas or certificates, not to acquire substantive education. There is little, if any, connection between the diploma or certificate received and the use of new skills or techniques in the classroom (OECD, 1998).

Beyond innovation, the criteria for the selection of cases were broad. In order to be included, a case had to present an innovation responding to one or more of the deficiencies most commonly observed in teacher training in the region today. This was a key characteristic of the research strategy: it was precisely through the observation of such cases that good practices could be identified. It was through observation, in turn, that we were able to judge how interesting, effective, or feasible an innovation was or has been in correcting a problem found in teacher training programs.

Current Trends in Teacher Training in Latin America

In what follows, we highlight and briefly describe what we see as main trends in innovation in teacher training. Trends are defined as common denominators, particular features or operating principles that have been identified in all or several of the cases and abstracted from their original programmatic context to become an incarnation of best practice. For purposes of presentation, the trends are intentionally organized. They start with the most generally accepted, applicable and incorporated in literally all programs under consideration and decrease by the degree of consensus or likely applicability. This section leads into a discussion of feasibility; the paper ends with a brief conclusion.

TREND No. 1: CLASSROOM-BASED TRAINING

The literature dating from the last decade indicates that effective in-service programs are those that focus on the practical needs of teachers in classrooms (Wolff, Schieffelbein and Valenzuela, 1994; OCED, 1998; Tatto and Velez, 1997; Oliveira and Farrell, 1993; American Federation of Teachers, 1998; Craig et al., 1998). This is confirmed by our (admittedly limited) review of innovations in the region. The most basic trend shared by the cases surveyed appears to be that effective teacher training, pre-service or in-service, is classroom based. The correlation is direct: the sooner student teachers come into contact with real-life situations associated with professional practice, and the longer this contact is maintained, the more effective the training.

Fe y Alegría[3] in Venezuela provides a good example of the benefits of classroom-based approaches. Teachers are trained through teaching. Schools are perceived and utilized as learning environments, broadly defined, where teachers learn by doing and through examples provided by peers or experienced teachers and supervisors.

The everyday challenges of the classroom and the lesson material become key training tools. This emphasis is deliberate. It aims to counteract the "learned disability" of new teachers trained—by law[4]—at post-secondary institutions (university-level schools of education or tertiary level pedagogic institutes). As alluded to above, training teachers at the tertiary level is (often erroneously) assumed to improve the quality of teaching. In some cases, including that of *Fe y Alegría*, this shift effectively removes most contact between the academic side of learning the profession and the practice of teaching in classrooms.

Since its inception, *Fe y Alegría* has been grounded in the realities of the classroom. Indeed, prior to their closing, the *normalistas* provided training that was applied in nature. Student teachers were immersed from the start into the realities and challenges presented by the classroom—areas which, to the judgment of the *Fe y Alegría* system, currently receive far too little attention in the nation's universities and pedagogical institutes. The training provided through *Fe y Alegría* thus seeks to reintroduce

[3] *Fe y Alegría*, a private network of Catholic schools for the poor operating in more than a dozen countries in Latin America, has a long history of involvement in teacher training both pre-service and in-service. These activities can be traced back to 1960 and the founding of the first *normalista* of the *Fe y Alegría* system in Caracas.

[4] Article 77 of the *Ley Orgánica de Educación* closed the nation's normal schools, pushing teacher training up to the level of higher education.

the practice- and community-oriented methods of teaching *lost* through training at the university level.

This type of approach is not unique to *Fe y Alegría*. Many programs, including the innovations examined here, emphasize early immersion in classroom practice.[5] ESTIPAC, a pre-service program in Jalisco, Mexico, trains teachers for rural schools. It includes classroom practice as early as the first semester of training. These experiences are videotaped and used as the foundation for group discussions and feedback. The Program for the Continuing Education of Teachers (PFPD) in Bogota, Colombia similarly emphasizes classroom teaching and learning. The program is centered around reflection on the practice of teaching rather than around abstract lecturing on teaching methods and pedagogy. The Accelerated Learning Program in Brazil offers yet another example. The program's creator uses the expression "learn as you teach" to describe its teacher training components. Despite the fact that the program's primarily focus is not teacher training *per se* (but rather on reducing rates of repetition and dropout; discussed in further detail ahead), it includes highly structured elements for teachers. These elements guide program implementation and, through implementation, train teachers: teachers receive training as they implement the program.

Emphasis on classroom practice should not be confused with the abandonment—assuming for a moment it takes place—of good preparation in subject knowledge. As a trend, the emphasis on classroom practice injects a dose of reality into the training process. The trend contrasts not only with teacher training removed from the realities of the classroom but, above all, with the excesses of endless theoretical courses and modules of pedagogy, educational planning or related subjects that regularly consume the lion's share of teachers' time in pre- and in-service programs. The idea is one of value added: value added in terms of how to apply theoretical knowledge to concrete situations and to the students in the classroom. The emphasis on classroom practice thus complements competency in subject knowledge. Indeed, it is in this respect that the trend appears in each of the innovations examined here.

TREND No. 2: EFFECTIVE TEACHER EDUCATION AS CONTINUING EDUCATION

All the cases examined for the purposes of this paper tend to blur the distinction between pre-service and in-service training. Pre-service, as noted above, increasingly includes early immersion in classroom practice; in-service, for its part, increasingly is connected to academic institutions that reach beyond their walls to develop close relationships with schools. Two practical implications of these trends emerge. For one, pre-service training tends to become shorter in duration. For example, *the Centros Regionales de Profesores*, CERPs (post-secondary institutions), a pre-service program recently developed in Uruguay by the Administración Nacional de Educación Pública (National Public Education Administration—ANEP), trains middle and high school level teachers in three years; this compares to the four or even five years now common in most countries in the region. Rather than offering a program of 20 hours per week stretched over many years, as the traditional system does, CERP is a 40-hours per week program. "The change from 20 to 40 hours is more than the arithmetic of reducing in half the total time. Forty hours plus boarding is the difference between a school and a 'total institution'... A total institution is what seminaries and army barracks are about. It is the total capture of the participant" (Castro, 1999).

Second, in-service training becomes longer. Rather than a single event, training is seen as a continuous process. Each of the innovations ex-

[5] Other examples abound. Of particular note are the Professional Development Schools (PDSs) in the United States. These schools form the last year in a five-year program of teacher education. Student teachers spend this fifth year in the classroom, teaching alongside expert practitioners. The PDSs run parallel to in-service activities making use of "veteran" teachers or veteran-teachers-turned-administrators as mentors for incoming teachers. For a more detailed discussion see: Darling-Hammond and McLaughlin, 1996; American Federation of Teachers, 1998; National Commission on Teaching and America's Future, 1996; Fideler and Haselkorn, 1999; and OECD, 1998.

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amined in this study shows definite movement in this direction. Training is conceived and used as a means for developing teachers' capacity for self-reflection and professional decision-making in the classroom. Such skills lay a foundation for effective teaching. They are applicable regardless of curriculum or student population. Once developed, it is precisely these skills that are reinforced by continuous nurturing.

Many of the innovations examined in this study reflect these considerations. In contexts such as Colombia (Chiappe and Zuluaga, 1998), Venezuela (Pérez Esclarín, 1998) and the rural areas of Chile (Williamson, 1998), the linking of training to career advancement and salary increases proved to be a powerful, albeit misplaced, incentive for teachers to accumulate diplomas and certificates. The training-credential linkage rendered any notion of quality or quality control meaningless. Simply put, it was the quantity of training that mattered—and the more the better. Training was an-all-but direct route to salary increases and career advancement. There was little, if any, guarantee that the training received was relevant or that what was learned was implemented in the classroom. Training remained an event-driven process.

The PFPD in Colombia was created with the explicit aim of developing an in-service alternative to the proliferation of short, poor quality courses for teachers largely disconnected from the practical concerns of teachers in classroom settings. The program stresses the continuous nature of in-service training. Training lasts for a minimum of one year and teachers are required to enroll in a new program every three or four years. In much the same vein, training activities developed within the context of the *Microcentros* Program in Chile sought, among other objectives, to overcome the lack of continuity in training and to do away with the emphasis on the accumulation of meaningless diplomas that was part and parcel of traditional teacher training strategies. *Fe y Alegría*, as described above, incorporates and implements similar types of activities, as does the PLANCAD in Peru. This program emphasizes follow-up and support activities well beyond formal training courses. Teachers receive at least four individual classroom visits during the six months immediately following their training and participate in two additional follow-up meetings with their peers in similar situations. These activities are expected to become permanent components of an integral system of teacher education in the (near) future.

Applications of technology in the field of teacher training reinforce the trend toward continuous teacher education. The Educational Technology Program in Costa Rica, first implemented in 1987 and continuing to date, provides a good example of such uses of technology.[6] Conceived within a constructionist framework, the program is in-service and computer based. Computers are used as tools "with which to think" and with which to structure and link intellectual tasks, technical competencies, and pedagogical skills. Training is provided through modules (*unidades de capacitación*) and adapted to the needs and abilities of the given target group; content difficulty and the intensity of technology increase progressively. Each training module integrates a variety of platforms and media. Information technology allows for constant communication among teachers and between teachers and facilitators; facilitation and monitoring are usually delivered electronically.[7]

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[6] The emphasis on teachers is illustrated, in part, by the distribution of program resources. Investments in training and pedagogical support (32.4 percent) have nearly equaled investments in equipment (36.2 percent).

[7] It should be noted that evaluations of the use of instructional technologies to train teachers suggest that technology cannot replace face-to-face contact. A generalized notion arising from the literature also suggests that distance education (a key application of technology to teacher training) is better suited for upgrading subject knowledge and disseminating new information than for changing classroom behavior or teaching practical subjects. See, for example, Robinson, 1996. It should be further noted that applications of technologies other than computers—particularly video—are in used in Brazil, Mexico and Chile. Review of these cases indicates that such technologies, when combined with other innovative trends (e.g., classroom-based training; group training), improve the quality of training provided. The CAPACITAR (in Brazil; discussed below), ESTIPAC and *Microcentros* programs regularly use video as a basis for critical discussion of how teachers and student teachers teach.

The introduction of technology into the teaching-learning process changes traditional patterns of teacher training. Training is no longer bound to fixed schedules or physical spaces of instruction. Rather, teachers are free to enter into training on their own and at their convenience. They can receive training as often as they log on to their computers.

This situation has implications for the management of training. To a certain extent, it is the individual teacher, as opposed to the school or the educational authorities, who decides when training will occur. Training thus becomes an issue of time management for teachers and, insofar as it is not an issue of staff management for schools, implementation can be relatively easy. The Educational Technology Program, for example, is neither management nor time intensive for school administrators. Training activities are, literally, taking place all the time for different teachers. Yet, from the point of view of administration, there are economies of scale: the administrative burden varies little if one or all teachers participate in these sessions.

TREND No. 3: GROUP TRAINING AND NETWORKING

Most of the innovations reviewed here are organized around work groups. By providing "critical friends" to examine and reflect on teaching and opportunities to share experiences associated with efforts to develop new practices or strategies, these groups—structured as teacher-to-teacher networks—become powerful learning tools.[8] Depending on the composition of the group, the training delivered responds directly to the needs of a particular school and its teachers. This is consistent with the approaches highlighted above. For example, prior to approval of any PFDP, teacher training must be integrated into the *Proyecto Educativo Institucional* (Institutional Education Project—PEI), which was developed with the participation of groups of teachers of the respective school. In much the same vein, rather than pulling together teachers from different schools, training provided through the *Fe y Alegría* system engages groups of teachers in the same school. In the Accelerated Learning (Brazil) and PLANCAD (Peru) programs, teachers participate in a range of networking activities, including follow up meetings, e-mail or regular mail exchanges (both countries) and peer-directed meetings (Brazil). Moreover, for those who also have access to the CAPACITAR Program,[9] weekly teacher-directed and focussed meetings are used to watch and discuss these videos and the good practices they present.

The *Microcentros* experience in Chile constitutes a particularly notable application of the group-training notion. In addition to the benefits network-based training brings to teachers, the program serves to break the isolation of teachers in rural areas. Despite the fact that rural teachers face many of the same issues as their urban counterparts, many challenges—including multigrade teaching, overage students and limited resources—are exacerbated by professional isolationism. Indeed, isolation contributes to teacher absenteeism and high rates of turnover (Tatto and Velez, 1997; ERIC, 1994; Robinson, 1996; Williamson, 1998).

The *Microcentros* Program departs from these considerations. Created by the Ministry of Education through the rural component of its Program to Improve the Quality and Equity of Education (MECE/RURAL), the program emphasizes training through communication. *Microcentros* are not physical locations but rather teacher-directed and focussed seminars held at

[8] This trend, as others, extends beyond the eight cases analyzed. Group training is paramount in experiences like the Teacher Actualization Centers in Mexico (see Tatto and Velez, 1997); teacher clusters in Thailand and Balochistan (Schaefer, 1993; Craig et al., 1998) and School Learning Action Cells in the Philippines (Schaefer, 1993).

[9] CAPACITAR, a distance education program for teacher training created by the Sistema Pitágoras de Ensino in Brazil, is available, albeit at a cost, to teachers and schools participating in the Accelerated Learning Program. CAPACITAR profiles high performance teachers in their classrooms. Through its 12 modules, supported by printed materials and tapes, CAPACITAR introduces a given topic, explains the pedagogy behind it, and provides a demonstration of its implementation in an actual classroom with students (see Oliveira, 1998).

the initiative of interested teachers and supervised by provincial representatives. The forum established by *Microcentros* give rural teachers, many of whom work at single-teacher schools, an opportunity to exchange experiences, take on joint projects, and otherwise learn from each other. Issues discussed address concrete concerns arising from the classroom; solutions are similarly grounded and are based on the experience of *Microcentro* participants.

The *Microcentros* have had a noticeable impact on methods used in rural classrooms. Teachers make intensive use of work groups and bring a greater variety of materials and student-oriented strategies to the classroom. Students seem to be learning more and rates of repetition and dropout have decreased. The program also appears to be increasing rates of teacher retention. In addition to providing a forum for discussion and training, the Microcentros provide platforms for the organization and participation of rural teachers (e.g., the National Organization of Rural Teachers, which later became the National Department of Rural Teachers of the *Colegio de Profesores*). Through such collective action, rural teachers have increased their salaries, restructured the financing of some rural schools, and opened the doors to exchange programs abroad.

TREND No. 4: INTENSIVE USE OF PEDAGOGIC SUPPORT AND SUPERVISION

Supervisory mechanisms lie at the heart of program success in many cases. Supervisors play an active role throughout the training exercises and supervision, in turn, is used to provide encouragement and constructive feedback. In most instances, supervisors are former teachers, a requirement in the Chilean and Venezuelan cases. The benefits of this arrangement are many: teachers-turned-supervisors assume their tasks with first-hand knowledge of the classroom and of the daily challenges that teachers face. To a large extent, they are able to approach their work as peers and tutors, rather than government bureaucrats or other "outsiders" with limited knowledge and experience of the realities of the teaching profession.

Under the *Fe y Alegría* approach, supervision is continuous, used to provide input into the teacher-learning process as well as into processes of school-wide planning. Considerably less importance is placed on monitoring and supervision *per se*. Supervisors, responsible for facilitating (as opposed to directing) processes of training within the schools, serve as pedagogical role models for teachers in service.

Supervision drives Brazil's Accelerated Learning Program. In fact, if any program deserves the label of "supervision-intensive," it is this one. Supervisors are chosen from among participating teachers and there is one supervisor for every ten teachers.[10] Each makes a four-hour visit to every classroom every week, 40 times a year. In much the same manner as their *Fe y Alegría* counterparts, these professionals are trained to provide constructive feedback to teachers, meeting with those under their supervision twice a month. Such meetings are participatory and collegial in nature. Under guidance from the supervisor, teachers exchange ideas and experiences with others. Supervision, accordingly, serves as a mechanism to train and coach teachers within a structured setting. Most teachers find that this is an effective strategy.

These programs are making major contributions toward a radically new definition of supervision that preserves little, if any, of traditional supervisory practices so common and so often meaningless, repressive or even corrupt in most countries across the region. Under this new definition, supervisor-tutors become key sources of on-site pedagogic support for teachers, both within the school and within the community. In the case of *Fe y Alegría*, they participate in the life of the school, providing input into annual planning processes and solutions to school-wide problems (e.g., malnutrition or learning disabilities in poor children; lack of resources; etc.). Supervisors also develop close links to their communities, providing an institutional link between teachers, administrators and interested

[10] During the first year of program operation, supervisors were personally appointed by and directly answerable to mayors. Training was provided by the Centro Tecnológico de Brasilia, a private, nonprofit educational organization providing technical assistance to the program.

parties outside school walls. Frequently, these new networks clash with more traditional networks of supervisors, producing debilitating effects on the effectiveness of training. Teachers participating in PLANCAD, for example, complain that insofar as regional supervisors do not share their training in new pedagogic approaches, advice regarding good practices in the classroom varies, even conflicts. This serves as a reminder of the difficulties involved with trying to move the pieces of the teacher training machine in unison.

TREND No. 5: INTEGRATION OF TRAINING INTO THE LARGER FRAMEWORK OF TEACHER CAREER REGULATIONS AND INCENTIVES

The original purpose of allocating "points" to salary scales or career ladders was to achieve precisely this type of integration. Indeed, the larger policy framework for career advancement and mobility all but revolved around the points teachers collected for (typically) training hours received or accumulating certificates. Yet such an incentive structure often proved misplaced, generating mediocre or substandard practices and a creating "credentialism" of sorts. By focusing on the external signals of training rather than on its content or effects, training became inseparable from personal advancement, with the former being a necessary and sufficient condition of the latter. The result was an overabundance of low-quality teacher training initiatives which (mis)focussed the minds of teachers on fulfilling formal requirements rather than on attaining substantive goals. Teachers had every incentive to obtain training but, rather than doing so to improve performance, the emphasis on the accumulation of points and credits drove teachers to seek training opportunities for the number of points they awarded. It was the end (the credits) not the process (training) that mattered, and any link to quality or performance seemed to get lost somewhere in between.

Examples of misplaced incentive structures abound. In Ecuador and the Dominican Republic, teachers received training when they came to the central (*núcleo*) offices to pick up their paychecks—a situation which, upon evaluation, was found to epitomize the situation described above. Teachers enrolled in training activities as a condition of their pay; few implemented what they learned in the classroom or were motivated to look for other relevant training opportunities.[11] Similar examples can be found in the United States and across Europe (see Morgan, 1997; Knott, 1997; Skyes, 1997). Simply requiring teachers to take "continuing education units" over summer or winter holidays or on allotted days, or linking continuing education units to increases in pay does not automatically lead to any changes in teaching behavior or strategies.

Several of the innovations reviewed here include activities to restructure the role of incentives in teacher training programs. Under the PFPD Program, teachers are awarded points only after completing a year-long training program preapproved for content and relevancy. The perverse effect of a "point system" thus is offset by the strict regulation of the quality and content of the training supplied. Notably, however, this regulatory mechanism does not seem to stifle the choice of training activities. By relying on qualified third parties (private and public institutions) to deliver the training, PFPDs allow for, and even encourage, diversity in subject area and methodology.

Fe y Alegria, in turn, has developed its training activities in a way consistent with the recruitment and selection practices of its school network. New teachers enter through a competitive selection process involving both a written exam and an interview with the school principal. If selected, they then receive a one-year appointment. During this time, novices are evaluated and observed. They also receive tutoring and strong support from supervisors and other pedagogic support personnel in the school. If, at the end of the first year, their evaluation is positive, a full contract is granted and novices, like the more seasoned teachers, continue to receive training through the *Fe y Alegria* system. This combined training/recruiting/selection procedure

[11] See Basic Education Improvement Program in Ecuador (EC-0035) and Basic Education Improvement Program in the Dominican Republic (DR-0122), both of which were Bank projects.

has gained considerable recognition. Employers in the public sector or other private schools consider it to be a strong indication of good teaching ability when seeking candidates for jobs in their own schools.

The CERP Program in Uruguay provides one of the most striking illustrations of recent innovations linking training and career-oriented interventions. The fact that it was the public sector (operating under myriad political constraints little known in private school networks) that initiated this program makes it all the more remarkable.

The CERP strategy seeks to reform teachers' recruitment, compensation and career patterns. Through a series of incentives, the program makes teaching more attractive to talented youth, overcoming the syndrome of teaching as the career choice of last resort that prevails throughout the region.[12] The CERPs offer full fellowships to half of the students and food subsidies to an additional 20 percent. Upon graduation, students are assigned a school or, in other words, they finish pre-service training with a guaranteed teaching position. This structure has produced notable results. It has drastically reduced dropout rates (which were on the order of 40 to 50 percent in Uruguay) to below 5 percent during the first year (Castro, 1999). These reductions, in turn, increase the cost-effectiveness of training. The per student cost of the new program is estimated to be 20 times less than those associated with the old program (Ibid.).

Before moving on, it is worth noting that this trend of integrating teacher training into the larger policy framework crosses the line from quite universally accepted practice into the territory of less than universally accepted or adopted approaches. It is interesting to note that the Accelerated Training Program, in contrast to the cases just described, characterizes itself as a "surgical intervention." Operating on the "surface," it leaves all rules and regulations governing schools and the teaching profession in place. The program is weakly linked to larger issues of career regulations or incentives. From the point of view of its proponents, this stands out as a virtue. The program can be readily applied without the need for more ambitious and politically difficult educational reforms. Incentives thus operate in a different way. Participation in the program is voluntary, both for teachers and schools. The highly motivated are the first to participate. These, in turn, also are most likely to be successful and, it is their success that motivates others to follow.

These findings are consistent with the basic premise of this paper. There is no single best way to solve the complex puzzle of teacher training. What works in Catholic schools for poor children in Venezuela or in the public schools of Bogota may be neither appropriate nor relevant for municipal schools in the Northeastern of Brazil that are battling high rates of repetition. Yet, there is a common denominator. This trend points to a new sophistication on the part of policymakers to consider and apply incentives. It is underpinned and driven by a strong awareness of counterproductive outcomes that have resulted from the (often misplaced) incentives built into traditional teacher training arrangements. It is this awareness, not the particular approach or design of incentives, that each of the cases examined here share.

TREND No. 6: TRAINING AS A RESPONSE TO SOCIAL AND EDUCATIONAL PRIORITIES AT THE LOCAL LEVEL

Several of the innovations share the common trait of being linked closely to their social and educational contexts. Indeed, those involved in running these programs see this closeness as a key to program effectiveness. Training is effective when: the challenges faced in a particular time and place are well understood; the teachers, students and schools toward which training is directed are correctly profiled; and the education

[12] Preliminary data from a six-country study on teachers' careers and incentives (SDS/EDU, OCE, Red de Centros, forthcoming) indicate that those entering the teaching profession are overwhelmingly female, single, and from households with levels of income and education generally lower than those of candidates entering other fields of university study. In the case of Uruguay, there is some indication that the CERPs are attracting some students from households with higher income and educational levels (see ANEP, 1999).

system is structured in a way that lends reciprocal support (e.g., from the surrounding community) to the training activities provided.

The *Microcentros* in Chile, for instance, were conceived at a time when urban schools were receiving strong support through channels that were not appropriate for rural schools. The CERP Program, to cite a further example, was created with the explicit objective of training teachers from and in the country's interior (see ANEP, 1999). Prior to CERP's creation, there was only one teacher training college (Instituto de Profesores Artigas) located in Montevideo. The CERP Program led to the establishment of five regional centers, each catering to students from and in its immediate and surrounding departments.

The Accelerated Learning Program, for its part, was designed within the context of a larger project to tackle high rates of repetition and their direct consequence, the abundance of overage children in the Brazilian schools. Yet, in implementing a series of activities targeted toward this goal, the program addresses another problem, namely the low level of teacher preparation. The Accelerated Learning Program deliberately avoids massive efforts in teacher training. Teachers are trained as they implement the program's highly structured activities. This strategy has proved to be both an innovative approach to training and an innovative response to local circumstances.

The Accelerated Learning Program targets teachers in the lower primary grades (1 to 4). In Brazil, these teachers usually receive training at the secondary school or *escuela normal* level. The highly structured components of the program directly respond to this (comparatively) low level of preparation. Through the implementation of these components, teachers are guided from start to finish, step by step, through various activities. The highly structured nature allows teachers, regardless of their level of preparation, to methodically implement a program that has been shown to increase student comprehension and reduce rates of repetition. The room for teacher improvisation thus is reduced, as is the probability of failure. Training is on-the-job. It comes through a combination of high quality support materials, short pre-service activities to introduce the program, and intensive supervision. These components work because they are tailored to the clienteles, both teachers and students, and targeted to the clearly defined objectives of reducing rates of repetition and the number of overage students in lower grades.

A similar approach can be found in the ESTIPAC Program, a private, pre-service program that targets rural teachers. Its course work is designed to meet the needs of rural schools and teachers. Students are drawn from across the country, with indigenous peoples comprising approximately 20 percent of the student population. Upon completion of course work, all students are expected to return to teach in their native villages or in other rural areas.

Unlike many other pre-service programs across the region, the ESTIPAC Program (like the CERP Program in Uruguay) is residential. During their stay, students are completely immersed in the realities of the rural life and the life of the community. This is a key component of the program. Immersion is seen as a way of better preparing teachers to face the challenges of teaching in rural Mexico. From the onset of their studies, students face issues that affect not only the classroom, but also transcend school walls, such as poverty, malnutrition, and variable school time due to the cultivation and harvesting of crops. These issues are reflected in and addressed through the curricula, all of which combine academics with community development and rural production, linking the school with the community. Indeed, as students learn and gain both knowledge and experience, they are expected to serve those around them (e.g., through courses on literacy and health education; agricultural production, etc.).

The ESTIPAC approach is proactive. Exposure to the realities of teaching in rural areas provides students with firsthand knowledge and experience of the conditions and issues that they will confront as teachers. This exposure, in turn, is expected to reduce rates of teacher turnover and absenteeism which, particularly in rural areas, correlate with a lack of relevant preparation. Such preparation also is seen as a measure to reduce emigration to urban areas.

Scaling Up and Replicability

In analyzing innovations in Brazil, Castro (1998) suggests the analysis of several factors in order to assess whether a given innovation can be extended beyond its original scope and context. These factors are important considerations in any discussion about replicability or large-scale applications of innovations. Prominent among them are costs and robustness.

Cost considerations generally conspire against innovations in teacher training. Even if informed with the best possible policy advice, the implementation of innovations like those reviewed here may be considered to be too costly to be feasible. When dealing with large-scale projects, the tendency is to err on the conservative side. Those responsible for developing a massive teacher training program often prefer to work with clear costs and familiar programs, avoiding the risks and unpredictability of innovative approaches.

Many innovations remain in pilot stages or are limited to individual states or school systems. As a result, many are believed to be expensive and thus not amenable to the budgetary constraints facing ministries across the region. Equity issues also complicate matters, in that innovations may require slower or technically demanding implementation arrangements that tend to conspire against the needs of teachers and schools located in isolated, remote or underprivileged areas. Under these conditions, if a high number of teachers (or all of them) are in need of training, decisionmakers are likely to opt for traditional lower-cost alternatives.

However, the cost data available from the innovations reviewed here do not suggest they are overly expensive. Costs of the Accelerated Learning Program (not only what we may identify as the teacher training components, but the whole "package" referred to above) range from US$60 to US$200 per student, depending on the components included. These figures are consistent with the standard benchmark of US$200 per teacher trained through a traditional program. The CERPs in Uruguay are considerably more expensive (US$3,500-4,000/year, US$2,500-3,000 of which represents room and board). Yet, the higher operating costs arising from the incentives provided to students are more than compensated by the lower dropout rates: the per-student cost of the program is estimated to be 20 times less than the traditional program (Castro, 1999).

In the end, of course, the discussion should revolve around issues of cost-effectiveness, rather than only costs. Training a teacher through a PFPD in Bogota costs an average of US$600, well above the standard cost of traditional training. When the prospect of a full year of training that includes an academically strong, well-focused, competitively selected and innovative program is taken into consideration, however, it ceases to be overly expensive. In fact, for the education authorities in Bogota responsible for its adoption, the program appeared cost-effective: (cheaper) traditionally conceived teacher training has been highly ineffective in changing teachers' practices.

Several of the programs reviewed (e.g., the Uruguayan CERPs, Colombian PFDP, and the Brazilian training within the acceleration program) are too recent to allow for a full evaluation or, more specifically, to permit a serious look at whether the changes introduced in classroom practices are producing the desired impact on learning. In the case of older programs, there has been little done to date in the direction of full impact evaluation—a research enterprise beyond the scope of this paper. Nonetheless, some in-

formation is available and can be used to formulate tentative conclusions.

The Accelerated Learning Program in Brazil has been implemented statewide in Minas Gerais and Maranhão and in an additional 24 municipalities in other states. The program has reached massive scales, covering approximately 200,000 students and about 8,000 teachers (Oliveira, 1998). As noted above, the program promotes and encourages changes in teaching methods. Through and with these methods, overage students become accelerated learners. Upon the successful completion of the program, they can skip two academic years, often catching up with their peers. And, once caught up, these students seem to be able to hold their own. A standardized national test applied to "graduates" of the program in 1997 indicated that their performance was average for fourth-grade students. A key test of program effectiveness will come when teachers participating in the Program return to regular classrooms at the first grade level (a process which is now in progress).[13] Even in the absence of these data, however, the benefits coming from reduced rates of repetition suggest that the program is producing the desired impact and doing so in a cost-effective manner.

The *Microcentros* Program has expanded its coverage of rural schools from 100 in 1991 to full coverage in 1997 (4,201 schools, 18,200 teachers and 333,540 students). Initially financed with the support of the World Bank, funds for program operation now come from the Chilean government. A full evaluation of the impact on learning is pending, yet indications of success abound: the elimination of frontal, traditional chalk-and-talk methods in rural schools; decreases in repetition and dropout rates; and improvements in test scores (although student achievement in urban schools continues to be higher). In this case, the cause-and-effect relationship remains far from clear. Some improvements in teaching could be seen as a consequence of more general investments in rural schools and, in the absence of impact and evaluation data, few definitive conclusions regarding the effectiveness of training, in and of itself, can be offered. Similar stories can be told of the ESTIPAC, *Fe y Alegria* and the Education Technology Programs.

This paper, as has been made clear from the outset, has focussed on what the innovations indicate, teach, or illustrate about desirable characteristics of teacher training. By concentrating on the principles incorporated in the programs, it has paid considerably less attention to the structure and functioning of individual programs. Thus any one of several factors, few of which have fallen within the scope of this study, can frustrate replicability. For example, in the case the *Fe y Alegria*, it may be the approach's close ties to the Catholic Church, its unique management style at the school level, and/or any other of its idiosyncratic characteristics that render its replication pointless in other systems. This should not preclude us from recognizing the value of classroom- and group-based training programs, especially if the same characteristics can be observed in other interesting and seemingly cost-effective programs. It is this value that trends identified throughout this paper have sought to highlight. Robustness, then, becomes less of a concern. Trends can be combined and packaged in multiple ways, as dictated by local conditions.

That said, some interesting findings do arise from the cases. Evaluation of the PLANCAD Program in Peru calls attention to the fact that innovative programs may not be able to take for granted the particular institutional context and resources that they need for the training of teachers to proceed as expected. The case deserves special consideration given the fact that it is the only example of an innovative program implemented at a massive scale in our selection of cases.[14] Rather than delivering training directly through the Ministry of Education (which

[13] Teachers are encouraged to remain in the program for two to three years and, upon completion, to become first-grade teachers. Through the implementation of methods and strategies learned through the program at the first-grade level, it is hoped that prevailing patterns of repetition will be overcome and that a pedagogy of success will replace the prevailing pedagogy of failure.

[14] PLANCAD's stated goal was the training of 129,029 primary school teachers in pedagogic techniques between 1995 and 2000. By 1999, 75 percent of this goal had been reached.

is responsible for the program), training in PLANCAD is delivered through contractual arrangements with universities, technological colleges and nongovernmental organizations. These institutions, after submitting applications for training contracts and surviving a competitive selection process, are given guidelines and instructions about the kind of training to be promoted, new pedagogic orientations and curriculum. Upon receipt of contract, the institutions then assume responsibility for delivering the training courses and for conducting follow-up activities.

This design constitutes a deliberate attempt to avoid a "cascade" strategy while allowing the educational system to benefit from expertise and innovations found outside the Ministry of Education. Yet, countrywide implementation has proved somewhat problematic. The supply of suitable, quality organizations willing and able to deliver good teacher training has been more limited than anticipated, creating sharp variations in the quality of training received by different groups of teachers.[15] Coordination mechanisms to fine-tune the programs planned by the government have taken longer than expected to go into effect and the technical and pedagogical skills of the intermediary entities often have been found wanting. In addition, given the uneven availability of suitable training organizations across Peru, training has not been delivered timely or satisfactorily to all departments and provinces (Instituto Apoyo, 2000).

Other findings arise from the Accelerated Learning Program. Oliveira (1998) notes that the program's effectiveness varies as a function of how components are structured and implemented. For example, financial constraints in Maranhao led to a less intense level of supervision than in Minas Gerais. This has had a noticeable impact on results. In Maranhão, on average, students skipped 1.6 years of study for one year of participation in the Program; in Minas Gerais, students skipped an average of 2.8 years. Repetition can be reduced through the implementation of an incomplete "package," as these data show. Yet, whereas no general rules regarding the optimal level of investment in each particular context exist, these data indicate that the closer the replication, the greater the rewards.

The message coming from other innovations tends to be encouraging as well. Despite some snags in execution, results of the PLANCAD have been positive.[16] Teachers are implementing new methods and techniques in the classroom. Results from the *Microcentros* are similarly encouraging. *Microcentros* are closely related to "quality circles" and other similar arrangements proliferating across the region. And, once the shift to the new understanding and practice of supervision has been put into practice, financial and managerial burdens are relatively modest. The PFPD, for its part, is more of a format, or framework, for the organization and financing of innovations in teacher training than anything else. The program defines, from the outset, guidelines regulating the minimum length of training activities and the pedagogic support required.[17] It then calls a public competition in which training institutions, including public and private universities, present proposals with diverse thematic foci and methodological emphases. The best proposals receive financing and, once implemented, are supervised and evaluated. This process is highly selective. Of the 302 pro-

[15] This is reflected in part by the fact that more than 70 percent of the institutions applying to participate in the program as training organizations were successful—a situation which can be interpreted as a low level of selectivity (compare with the equivalent figure for the Colombian PFPD, below). Several other indicators collected through monitoring and evaluation activities related to PLANCAD point in the same direction.

[16] Evaluations of the program indicate that, even if the adoption of new pedagogic approaches and techniques has been far from universal, a majority of teachers in Peru now have adopted practices such as team work in classrooms and learning based on children's own experiences. This represents a change when compared to the recent pre-PLANCAD situation. Given the short time elapsed since training, however, the permanence of such changes remains open to question.

[17] Among the criteria used for the selection of proposals, relevance for classroom practice, strengthening the school-community relationship and links with particular projects and missions of the schools of participating teachers are highly valued.

posals presented over the last two years, 64 (roughly 20 percent) have been financed. Such a flexible implementation strategy may well be applicable in other settings. *Fe y Alegría*, in turn, is in the process of establishing a higher education institution in Caracas. It will include a three-year pre-service training program open to all prospective teachers, not just those intending to teach in *Fe y Alegría* schools.

Conclusion

A strong case can be made that much more than training is involved in effectively tackling the troubles of teaching in Latin America. Indeed, as data from the Third International Math and Science Study (TIMSS) indicate, differences in teaching methods offer a compelling, albeit neither definitive nor conclusive, explanation for differences in student performance. Other variables, few of which ever enter the training "equation," also come into play. Why should it be taken for granted, for instance, that teaching will attract the less able candidates from the eligible pool of students in each generation? Why should we think that even the most effective training would transform teaching when the incentives structuring the environment in which teachers work discourage performance and favors shirking? Is there a good reason for the teaching career to be organized in such a way that it becomes almost unique in terms of recruiting, promotion, evaluation, mobility and firing practices?

These are questions that require serious consideration if we want to go beyond in-service training as the dominant response to inadequate teaching. The near-universal willingness to invest in teacher training appears to be expedient, both politically and economically, in that it is accompanied by a clear neglect of other outstanding sides of the problem. Training, as a policy alternative, has the advantage of being considered as a win-win proposition: it is less politically charged and even popular among teachers and unions. Issues related to the socioeconomic status of teachers, their performance and evaluation, and prevailing incentive structures, in contrast, are politically explosive, often laden with ideology and unrealistic expectations on all sides.

Political feasibility has been and justifiably will remain a key component of any comprehensive policy to improve the quality of education. It further increases the attractiveness of training. Yet dissatisfaction with dominant practices is widespread. Indeed, this paper has taken this dissatisfaction as its starting point and highlights innovations that have sprung up throughout Latin America in response.

Through the examination of these innovations, the paper has identified six major trends shaping what may prove to be best practices:

- Classroom-based training.
- Effective teacher education understood as continuing education.
- Intensive use of group training and networking.
- Intensive use of pedagogic support and supervision.
- Integration of training into the larger framework of teacher career regulations and incentives.
- Training understood as a response to social and educational priorities at the local level.

In an effort to respond to the failures of traditional teacher training ventures, each of the eight programs examined combined several of these trends into viable and effective packages. These packages not only encompass good or new ideas in the field, most of which find support in the broader literature, but they also emerge as ideas with concrete consequences, deliberately put

into practice to address critical problems of low quality teachers across region and to overcome mistakes that made teacher training programs ineffective, even counterproductive, in the recent past.

The discussion of scale, cost and replicability, although preliminary, gives reason for optimism as well, especially regarding the feasibility of extending the reach of the practices identified as trends. The diversity of the programs reviewed here should serve as a reminder that trends embody nothing more than what appear to be guiding principles and good practices. Whereas each program shows potential for some degree of replicability, none rightly can be seen as a model to be copied or replicated in detail. Each poses institutional and contextual requirements of its own that should not be taken for granted at the design and implementation stages in any future initiative that finds inspiration in them.

This paper does not advocate particular recipes for teacher training. Rather, it emphasizes the importance of having the right ingredients in every recipe. Its list of trends is by no means exhaustive. It merely represents a first response to the need reiterated by practitioners and specialists across the region (and the world) to synthesize what seem to be interesting and promising innovations and to place them in a larger context. In matters of training teachers, there is no one best way. But powerful signals are being sent from the field, signals that have consequences and implications for how teachers will be trained in the future and for how international organizations such as the IDB will chose to structure their support.

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